

IMPROVEMENT OF CORN THROUGH SELECTION.

Care Will Bring Splendid Results in a Greater Yield.

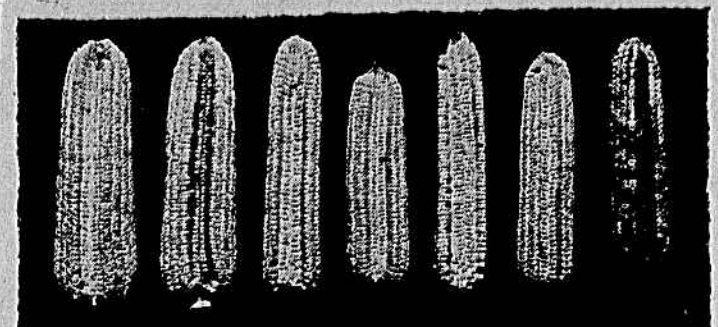
MUST BE SYSTEMATIC WORK

Helpful Directions by the Experiment Station at Blacksburg.

(Special to The Times-Dispatch.)

VIRGINIA EXPERIMENT STATION, BLACKSBURG, VA., May 6.—The selection of seed corn to be successful must be made in a systematic manner. Slipshod work will only result in failure and disappointment. The best results will be obtained by preparing and enriching a piece of land with extra care for the seed patch. On the land the grain obtained from selected ears, as described further on, should be planted, a single row being devoted to the grain from each ear. The rows should be about 3 1/2 to 4 feet apart and the grain may be planted in hills or drills, as deemed preferable. When planted in hills about two stalks per hill should be left, except in the case of the larger river bottom types, and when planted in drills the grain should be placed about one foot apart in the rows. The choicest and best ears should be planted near the center of the patch and the poor ones on the outside. The butts and tips of all the ears should be carefully shelled off before planting, and these may be seeded in several rows on the outside of the plot to protect it from admixture with foreign pollen from corn in neighboring fields.

ISOLATE PLANT.
The seed plot should, of course, be isolated as much as possible, at least 50 to 100 rods from any other field of corn, and even then there is some danger of cross fertilization, as the pollen of the plant is very abundant and is carried a long distance by the wind. By planting the patch as suggested, a record can be kept of the product of each ear of corn with but little expense or trouble, and the following year the seed can be selected from the choicest and most vigorous individual plants. The



LEADING VARIETIES.
Left to Right, Shaw's Imp., Huffman, Cock's Prolific, Virginia Ensilage, Hickory King, Champion White Pearl, Early Leaming.

by Mr. J. S. Leaming, of Wilmington, O. Mr. Riley commenced his improvement of corn about 1875 and Mr. Leaming in 1825. Thus it is that these two varieties through the intelligent selection of these gentlemen have become two of the standard varieties of the great corn belt.

PRODUCING YOUR OWN SEED.
The farmer should produce his own seed corn because it is a needless expense to purchase fresh seed every year and when once he obtains a variety adapted to his soil and climatic conditions it will give a larger yield and prove more satisfactory if he selects it so as to keep the type uniform and the quality and yield up to a certain standard than fresh seed of unknown origin. Probably it is more important that the farmer produce his own corn seed than that of almost any crop he grows, because the plant is so susceptible to climatic influences. Notice the difference in the characteristics of corn produced in the semi-tropical regions as compared with that growing in Minnesota.

In the tropics the stalk is enormous and under irrigation in Mexico often three to five large ears are obtained and the stalks frequently reach a height of 18 to 22 feet. In Minnesota, on the other hand, the ears are small and the stalk not more than 5 to 8 feet high. Observe that a well established variety of river bottom corn, such as the Huffman, when grown on uplands frequently proves unsatisfactory. The studious farmer has also noted that the variety of corn that does

duction of seed the following year. When the corn is coming up it should be run over two or three times with the weeder, and later with a two horse cultivator. An implement of the Tower type is very satisfactory for the purpose. It is a strictly surface cultivator, and it has been shown time and again that deep cultivation of corn is a mistake, especially after the first cultivation. Deep cultivation is unnecessary if the seed bed has been properly prepared.

The slovenly farmer is the only one who believes that deep cultivation is essential and his mistaken notion arises from his failure to cultivate the land properly before planting the corn. In other words, deep cultivation is like trying to put the cart before the horse—to do that after the crop is up which should have been done before planting.

Let the cultivation be persistent, keep it up.
When the corn gets so high that a two horse cultivator can no longer be used, use a single cultivator of the "Planter, Jr." or Iron Age type. By muzzling the horse the corn can be cultivated until it is out in full silk and tassels if necessary. By doing so the moisture will be retained in the ground and the plants kept in full health and vigor, and this point cannot be emphasized too strongly for let it be remembered that it is individual excellence we are after, and that can only be secured through the most careful cultivation. As soon as the corn be-



SHOWING VARIETIES, SIZE AND SHAPE OF GRAINS FROM A SINGLE EAR OF CORN.

most rapid progress will be made by seeking out and improving the choicest individual plants and ears, and therefore if one is to gain anything from the special seed patch, a careful record should be kept of the individual ears and plants or the results obtained will fall far short of what might be accomplished by the exercise of greater care and vigilance. The special seed patch is an essential part of the work of corn selection, and will require the expenditure of but little more money, time or effort on the part of the farmer. Certainly the outlay will not be at all commensurate with the increased yield of corn which he should obtain.

At this juncture many persons will be wondering whether selection will pay or not. The question can be answered in several ways. There is an old axiom which says, "Eternal vigilance is the price of success," which might be appropriately taken as the motto of the corn breeder. Will it pay to select seed corn? Who would ask to consider that one bushel of well selected corn will plant ten acres which ought to produce 400 bushels of corn worth anywhere from \$100 to \$200 per acre? A bushel of seed corn has been known to return 700 bushels at the next harvest, which on the same basis would represent a money value of \$560 per acre. The cost of a bushel of improved seed corn may be \$2, and many a man thinks because he can buy it for 50 cents a bushel that he is wasting \$1.50. He does not look far enough ahead to realize how vital the seed will influence the yield, and hence the profits to be derived from his crop. He is often quite willing to spend his best time and effort in the preparation and fertilization of his soil, though not willing to pay a good price for the highest quality of seed to put on his land. What folly! what a waste of human energy; how short-sighted on the part of the farmer!

Selection, which has resulted in obtaining good seed, has been known to increase the yield of corn from 25 to 35 bushels per acre.

GOOD SEED IMPORTANT.
These facts make it evident that good seed is of the utmost importance, and as this good seed can only be obtained through selection, it is to the interest of the farmer to give attention to such an important matter at once. If he has not the seed let him pay a good price to some reliable party who can furnish him with some thoroughbred corn that has well established, desirable hereditary characteristics and that can transmit these to succeeding crops.

The question naturally following is how to go about seed selection. The farmer who has given no attention to the subject can possibly afford to buy his seed the first year, but not after that. No person can grow as good seed as the farmer as he can produce himself and certainly when he finds it necessary to purchase seed, he should not have to go far from home. People say seed "runs out"; they say a change of seed is necessary; they say they must buy in new varieties from a long distance in order to increase the vigor. All these things are untrue.

Seeds run out because they do not receive the care and attention on the average farm that the originator gave them in their process of development and hence they revert and lose the special qualities that gave them their peculiar value. Corn has been grown on the same farm and on the same land for years and years and has gradually improved throughout the whole period. No variety of corn is found in the case of Boone county white, developed by Mr. Riley, of Thornton, Ind., and early leaming developed

well on his neighbor's farm does not give us good satisfaction on his. He has also observed that corn brought from Ohio does not do well the first year, though it may do better the second and third. On the other hand, he has sometimes observed that corn brought from neighboring States and counties is an utter failure there, and these things teach as plainly as nature can indicate that the farmer should pay attention to the selection and development of corn for his own locality and for his specific needs. As corn is easily selected and preserved there is no reason why the farmer should not become his own seedman and so save his pocketbook from the extortion of unscrupulous dealers who are only too glad to send him some old variety of corn of uncertain origin and value under some new name at a fancy price. Thousands of dollars are annually squandered in the purchase of seed corn of no value to our farmers, nor is this the worst feature of the case as the seed purchased is often inferior.

THE CULTIVATION.

Having obtained some good seed suited to his locality either by purchase from his neighbor or from some reliable seedman, he should prepare at least one section of his field carefully for the pro-



Types of Corn Stalks from a Well Established Variety, Showing How the Characteristics Might Be Influenced by Systematic Selection.

gins to flower go carefully through the field and destroy the lesser of all plants that are barren so that the pollen from these will not fertilize the silks of productive plants. Make sure that the detasselling is done before the pollen forms. The corn plant should also be carefully suckered, not more than two plants should be allowed to remain in a hill, and any plants showing evidences of smut should be pulled up and destroyed.

Throughout the growing season the farmer should pay frequent visits to the corn field, so that he may study the individual plants and select those that show special vigor and the desirable characteristics he wishes to perpetuate. This study of the growing plants is a very important matter, for one cannot always rely with any degree of certainty on going into the field in the autumn and picking out the great big ears from the big coarse plants. To succeed in selecting corn one must study the individual ears closely in order to be able to make fine distinctions, for it is the ability to make fine distinctions that measures the success of the artist in any line and quite as much in the case of corn breeding as in any other pursuit.

Having made a previous study of the plants when harvest time arrives, the farmer is ready to go into the field and make an intelligent selection from the stalk, showing the characteristics he prefers and bearing ears of the type he has set up as his ideal. Of course, a standard is essential, which means that the farmer must determine whether he wants a very large, coarse stalk with the ear high from the ground or a small, square stalk with the ear set on lower down; whether he wants a very large, coarse grain ear or a medium sized compact one closely packed with flinty, wedge-shaped grains. A word of warning may be advantageously here. It is always unwise to select from abnormal plants or animals. Such selection increases the tendency to variation and when carried to excess results in the development of undesirable qualities, increases the tendency to disease and produces an abnormally coarse product. On the other hand, selection from too small stalks would result in a loss of vigor. Do not choose from either one of these extremes; the happy medium is much better and safer and will give far more satisfactory results in the end.

Select the ears from about healthy stalks that have made an uniform growth throughout the season, and that are well provided with leaves so as to furnish plenty of fodder. Be sure that the tassel of the plant is strong and vigorous, and that it is free from any evidences of disease. Select ears that are upright growing plant and firmly rooted in the soil.

TWO METHODS.
Two methods of selecting ears will present themselves, and the farmer must choose which he deems best for his locality. He may either select one good sized ear from a stalk or two medium-sized ears. By selecting two medium-sized ears he will obtain larger yields in the long run, though he may have to follow up his practice several years before getting the hoped-for results. In either case the type of ear selected should possess the same qualities save for size only. Select only ears that are well silked, that have a good covering of husk coming well over the tip. An excessive amount of husk, of course, objectionable, as it indicates coarseness. The husk bearing the ear should be short and not over an inch or an inch and a quarter in diameter, and the ear should point downward. The number of rows of grain on the ear will vary with the variety, but in nearly all standard varieties they run from 18 to

20 or even 24. In a few varieties it may run as low as 12, but 18 or over is a fair average. The rows should be straight from tip to butt and uniform; that is, the grains should not be deeper than wider at the butt than at the tip. This means that the ear must be uniform in circumference at the tip and butt, and that it must be perfectly straight. The grains should be rather wedge shaped, though not too long, and if it is a white dent corn, they should be a pure white on a white cob and flinty in texture, though not necessarily extremely hard. The tip of the ear should be perfectly covered with corn as well as the butt; that is, the grains around the butt should form in close around its attachment to the stalk. No much stress should not be placed on the development of the tip and butt, as this

FAULKNER'S OR FASHIONABLE ABRICS.

OUR BUYERS have just returned from New York, where they took advantage of several big sales, and we are going to give our customers the benefit of our bargains. We'll start Monday, and all through the week you will see the results of our efforts in your behalf.

WATCH FOR OUR FUTURE ANNOUNCEMENTS. THEY'LL INTEREST YOU.

THREE SPECIALS THAT ARE BOUND TO MEET THE APPROVAL OF JUDICIOUS SHOPPERS.

NAVY BLUE CALICOES—In figures, checks and stripes, 2c a yard; 10 yards to a buyer.

LARGE TOWELS—20x40 inches; regular 10c value, 6 1/4c; four to a buyer.

BLOUSE LINEN—Just the thing for the children's summer suits. Usual price 16c; Monday sale, 11 3/4c.

SILKS.

WHITE HABUTAI—One waist pattern to a buyer. 29 inches wide.....22c
27 inches wide.....30c
26 inches wide.....48c

SILK MOUSSELINE—In lavender, white, green and light blue; our Monday price, 11 3/4c.

NOVELTY SILKS—In small patterns; seasonable weight, fashionable and serviceable; for Monday the price goes down from \$1.00 to 50c.

TAFFETA SILKS—A complete new line; stripes, hair lines, checks and figures; charming and chic; 59c value for 48c.

WASH GOODS.

SHEER ORGANDIES, large floral effects, 9c.

NOVELTY VOILES—In plain colors and small checks. These are regular 10c goods; our Monday price will be 8 3/4c.

MADRAS GINGHAMS—All buyers are familiar with these splendid goods. On Monday you'll get regular 8 1/2c values for 4 7/8c.

FINE PERCALES, 36 inches wide; small dots, rings and figures; the best 12 1/2c goods on Monday, 9 3/4c.

Men's Negligee Shirts.

We cannot deceive you. They are without cuffs, therefore on Monday they will be 80c.

Boys' Shirt Waists.

Only two or three sizes; therefore for Monday you can secure a 50c value for 25c.

DRESS GOODS.

CREAM VOILE—Commence making your summer dresses now. These goods are 36 inches wide, and on Monday will be

25 Cents.

OPERA CREPE will make up into a charming evening gown. The price is only

12 1/2 Cents.

FIGURED MOHAIR and other novelty mixtures, 30 inches wide, 50c value for

39 Cents.

WHITE GOODS.

SHEER WHITE LAWN, 40 inches wide; on Monday

5 Cents.

CANNON CLOTH, double width, linen finish, 10c value, for 8 3/4 Cents.

FRENCH LAWN, 45 inches wide, 25c value; on Monday the price will be 15 Cents.

FINE FIGURED MADRAS—neat stripes and figured effects; 16c value, for

12 1/2 Cents.

Novelty Styles Ladies' Neckwear.

Latest designs; the usual 25c price has been cut in two; now 12 1/2c.

Percale Shirt Waists.

well made, with neat collar and tab attached; good buttons; 39c value for 20c.

Ladies' Lace Hose.

These are extra quality and a fast black, 17c.

Sheer India Linon Waists, with white linen collars; well tailored. This is a genuine Monday bargain special, 49c.

White Lawn Waists, full fashionable sleeves, tucked back, front and sleeves. Some embroidered, others with medallions; \$1.25 value for 98c.

Mercerized Petticoats, in black and black and white; a wonderfully cheap purchase at 48c.

Tucked Mohair Skirts, in blues and blacks; these skirts have a fine lustre and are of extra quality, \$2.98.

Swiss Ribbed Vests. A special offer for stout people. 10c.

Colored Taffeta Silk Parasols.

The usual \$2.50 value, in blues, greens and browns on Monday will be \$1.98.

\$3.00 value, with fine boxwood handles, in a variety of catchy colors; the Monday price will be \$2.19.

Unbleached Cotton, 36 inches wide; the usual 7c value on Monday will be 5c.

Bleached Cotton, 36 inches wide; Monday 5c.

AGENTS FOR STANDARD PATTERNS—10c and 15c. Seam Allowance.

E. T. FAULKNER CO. THE DAYLIGHT CASH STORE, FIRST AND BROAD STREETS.

BERRYVILLE.

Pretty Valley Town Shows Many Improvements.

(Special to The Times-Dispatch.)

BERRYVILLE, VA., May 6.—A fine new hotel is being built here on the site of the old "Virginia House," which has been demolished for the purpose. The grounds have been extended, and are being beautified. The work is being done by a syndicate. Mr. Morgan, of Page Brook, is president.

Mr. Morgan, who for many years has made the table at the miserable building in Berryville, dignified by the name of hotel, celebrated for its delicacies and service, has rented Mr. R. Blackburn Smith's large house at the corner of Main and Water Street for a hotel, which will be called the "Virginia House." This house with its immense porch, which will be the largest in the valley, will be a new type of a hotel.

The large addition to the Berryville Milling Company's plant is very rapidly finished and when done it will be the largest mill in the valley.

Mr. P. E. Church will shortly be thoroughly renovated and more beautiful. It will, at the same time, arrange so as to be lighted with electric gas.

The Virginia Ore and Iron Company are doing a rushing business at Cuestleman's Ferry, in Shenandoah County, a few miles from Berryville, and large stables are being built for mules and horses for the workmen.

Mr. Fannie Tucker, Carmichael, who has lately sold his house on Church Street, to Dr. E. Harris, is building a handsome brick residence on "The Hill," near Mr. Wm. McDonald.

Commonwealth's Attorney William D. Lewis, a Franklin, recently gave a most enjoyable party at "The Hill," which is a pretty residential part of Berryville.

Mr. A. P. Osborne is also adding to his home on Main Street, and is enlarging and beautifying his grounds.

Mr. Able has recently built a pretty house on the site of the old "Virginia House," a large addition to his store.

Probably the most potent feature in the development of the town is the new hotel, which is being built at the foot of the Blue Ridge, in the crystal water, which has been the pride of the mountain and is so clear and delicious.

With the Shenandoah bridge with an iron structure, the coming of the trolley cars, the town of Berryville must become a large residential and business place.

FREDERICKSBURG SOCIAL.

(Special to The Times-Dispatch.)

FREDERICKSBURG, VA., May 6.—The Fredericksburg College Orchestra, Professor F. A. Franklin, director, gave a most enjoyable concert in College Hall before a large and delighted audience on Friday night. There were ten numbers, including a vocal solo by Miss Kate Dargatzis. The selections were all well chosen and beautifully rendered. The first ladies' prize was won by Mrs. A. T. Embrey, the second by Mrs. E. G. Vaisey.

Mr. C. C. Rowlett won the gentlemen's first prize and Mr. H. H. Johnson, the second. Refreshments were served during the evening.

Mrs. M. L. Adams and Mrs. Lucy Q. W. Brown, who spent the winter in Florida, have returned home.

Miss Fannie Tucker, Carmichael, who has lately sold his house on Church Street, to Dr. E. Harris, is building a handsome brick residence on "The Hill," near Mr. Wm. McDonald.

Mr. and Mrs. Charles L. Ruffin entertained last Thursday night at their home on Main Street, Thursday night. The first ladies' prize was won by Mrs. A. T. Embrey, the second by Mrs. E. G. Vaisey.

Mr. C. C. Rowlett won the gentlemen's first prize and Mr. H. H. Johnson, the second. Refreshments were served during the evening.

GLoucester, VA.

(Special to The Times-Dispatch.)

GLoucester, C. H., VA., May 6.—For the past week County Court has been in session, with Judge G. T. Garnett on the bench, and numerous lawyers from the adjoining counties present, among them Mr. Mangus Jones, of New River, and Mr. Herbert Lewis, of West Point.

Mr. J. W. C. Jones, of New River, was called to Williamsburg Tuesday to attend the convention being held there, and then to Richmond to attend the funeral of General Fitzhugh Lee on Thursday.

Mr. Mangus Jones is visiting here, Dr. J. W. C. Jones, of New River, is visiting here, and Mr. Cheney have moved into their recently completed and very handsome house on "The Hill," near Mr. Wm. McDonald.

Mr. Burier and nephew, of New York, are at "White Marsh."

Mr. and Mrs. Francis Lee, son and daughter, of Howard county, Md., are visiting the Misses Tabb, at "Newstead."

Mr. Joseph Hopkins, of Newport News, spent a few days during the past week at "Waverly."

Messrs. John Bryan and William Grey, of Richmond, are at "Eagle Point."

Miss Mary Brooke Byrd has returned from a visit to her sister, Mrs. Coston Waller, in Norfolk.

Dr. Charles Page, of New York, and Dr. Proctor, of Englewood, N. J., who have been visiting Mr. and Mrs. A. K. Withers at "Severity," left for their respective homes, some time ago.

Lieutenant Charles Fahr, wife and children, are the guests of Mrs. Elizabeth Fahr, at "Eagle Point."

Mr. James Fox, of "Baine," is on a visit to his father, Mr. F. Fox, in Albemarle county.

Mr. and Mrs. Ira Weaver have returned from their wedding trip and are at "Burlingame."

Miss Nina Hopkins, of "Waverly," is visiting her grandmother, Mrs. Hepburn, in Ashland.

Miss Annetta Slinguff has returned from a trip to Baltimore.

Mrs. F. B. Curtis, of Hampton, is visiting her parents in Robin's Neck.

At a meeting of the vestries of Abington and Ware Parishes, it was decided to extend a call to the Rev. St. Tyler as assistant pastor to Rev. Wm. Byrd Lee, in the two parishes.

ATLANTIC COAST LINE R. R. SUNDAY EXCURSION BETWEEN RICHMOND AND PETERSBURG.

40 CENTS—ROUND TRIP—40 CENTS. Tickets good on all regular trains limited to date of sale.

COAL.
Best quality, low prices, prompt deliveries.

WOOD.
All kinds, sawed to order. We respectfully solicit a portion of your orders.

RICHMOND COAL CO.
JOHN M. KING, Manager.
Telephone No. 2938.
Office, No. 1811 E. Cary St.